MICRON TECHNOLOGY, INC

ALGORITHM FOR TRANSFORMING THE OPTICRAM 256 X 128 IMAGE INTO THE PROPER 512 X 128 ARRAY SPACE.

(* described in psuedo-PASCAL terms. For purposes of simplicity we assume that bits are individually accessible. Implementation on most computers will require bit-twiddling to simulate the effect of what is shown below. This algorithm is accurate for the lower array which is the array used when ONE-ARRAY mode is used on the MicronEye. The changes to be used when transforming the upper array are noted parenthetically. *)

```
VARIABLE DECLARATIONS
grid      : ARRAY [0..513,0..128] OF bits;
optic_ram : ARRAY [0..255,0.127]  OF bits;
x,x3,
y,
col_ctr,
row_ctr   : INTEGER ;

PROCEDURE TRANSFORM;
BEGIN
FOR row_ctr := 0 TO 127 DO
    FOR col_ctr := 0 TO 255 DO
        BEGIN
        IF ODD(row_ctr) THEN
            IF ODD(col_ctr) THEN
                BEGIN
                y := row_ctr + 1;
                x := 2 * col_ctr + 3; (* upper array is 2*col_ctr*)
                END
            ELSE
                BEGIN
                y := row_ctr;
                x := 2 * col_ctr;     (* upper array is 2*col_ctr + 3*)
                END
        ELSE (*even row*)
            IF ODD(col_ctr) THEN
                BEGIN
                y := row_ctr;
                x := 2 * col_ctr;     (* upper array is 2*col_ctr + 3*)
                END
            ELSE (*even column*)
                BEGIN
                y := row_ctr + 1;
                x := 2 * col_ctr + 3; (* upper array is 2*col_ctr*)
                END;
        grid[x,y] := optic_ram[col_ctr,row_ctr];
        END;
END; (* end of transform procedure *)
```